Class Title: Senior Programmer/Analyst **Class Code: 10725**

A. Purpose:

Develops and maintains information systems to ensure efficient systems integration and operation. Applies and expands client business knowledge in solving business problems to meet the needs of clients.

B. Distinguishing Feature:

The Senior Programmer/Analyst works on all phases of information systems development, serves in a leadership role of peers and subordinates on development teams, acts as a mentor to other members of the programmer/analyst classification group, and maintains and supports time-sensitive systems with wide impact and visibility. At this level, the incumbent has frequent contact with clients on system design and is fully knowledgeable of the client's business and information flows, as well as the tools and technologies needed to meet client information requirements.

The Programmer/Analyst provides assistance for on-going system support by maintaining established information systems and serving on development teams for new information systems.

The Information Technology Specialist serves in one or more specialized roles in the areas of client relationship, business analyst, technical expert and project management. At this level, the incumbent is assigned systems and projects with high visibility that impact an entire agency.

C. Functions:
(These are examples only; any one position may not include all of the listed examples nor do the listed examples include all functions which may be found in positions of this class.)

1. Serves in a client relationship role in a learning environment to provide internal agency consulting services between assigned agencies and the central information technology organization.
   a. Provides agencies with a contact to facilitate an effective response to their requests and concerns.
   b. Identifies, defines and recommends analysis and development projects based on goals and objectives of the agency.
   c. Proactively initiates ongoing dialogue with clients to understand changes or potential changes to client's business and ensures that IT service issues are resolved.
   d. Expedites resolution of agency problems/complaints.
   e. Identifies issues/trends and escalates where appropriate.
   f. Develops recommendations for agency IT budget amounts.
   g. Assists agencies with the setting of their IT priorities and incorporating those priorities into their IT strategic plan.
   h. Assists agencies with transition to new processes and technologies.

2. Performs project management functions to ensure effective and efficient business solutions.

a. Serves as project manager on projects within an agency business area.
　　b. Establishes priorities within the project.
　　c. Estimates resources needed.
　　d. Evaluates and estimates project costs.
　　e. Develops and maintains plans and timeframes for the project.
　　f. Monitors progress of team members.
　　g. Monitors project milestones and resource utilization, requesting additional resources as needed.
　　h. Manages project scope and provides change management.
　　i. Conducts post-project evaluation.

3. Serves in a business analyst role in a learning environment by working with a client agency to plan, conduct and direct the analysis of complex business processes.
　　a. Analyzes and reviews agency business processes to identify problems and opportunities for process improvement.
　　b. Comprehends basic business issues and contributes to IT business initiatives by translating business needs into understandable requirements.
　　c. Reviews agency business processes to maximize the benefits of information systems.
　　d. Learns current agency business strategies.

4. Defines client requirements within multiple business areas to determine solutions to business problems.
　　a. Meets with clients to identify and define problems.
　　b. Analyzes business processes.
　　c. Researches alternative technology solutions and evaluates feasibility of alternative approaches.
　　d. Conducts cost/benefit or feasibility analysis.

5. Designs, develops and implements information systems and enhancements to current systems to meet user needs.
　　a. Designs system architecture and work flow.
　　b. Identifies the source of a system problem and designs a solution.
　　c. Creates system requirements and specifications documents.
　　d. Assigns and reviews team members' work.
　　e. Writes system code.
　　f. Performs system testing.
　　g. Implements system.

6. Performs other work as assigned.

D. Reporting Relationships:

Reports to a technical administrator. Typically does not supervise, but may direct the work of and mentor other programmer/analyst staff.

E. Challenges:

Challenged to learn the culture and organization of the agency as well as the

central information technology organization, how best to escalate issues and initiate dialogues with agency management, communicate technical issues to non-technical personnel, obtain agency time and commitment needed to define business processes within a business area or to define requirements and specifications, complete projects on budget and on schedule and manage agency expectations. Further challenged to obtain all system requirements and specifications, integrate multiple systems that exchange information, appropriately apply technology to system designs, assist system users in the use of new technology, develop a design that is easy to modify, and apply modifications and enhancements to applications without interrupting the client work flow.

Typical problems resolved include project issues and conflicts, business area users who do not understand the importance and value of analyzing their business processes, loss of project resources, insufficient project definition, unrealistic expectations, missed or incorrectly defined requirements causing re-work which can impact the project budget and scheduled completion date, system design flaws and client's business process flow disruption by implementation of a new application.

F. Decision-making Authority:

Decisions made include recommendations to the agency regarding specific processes, how to manage tasks for an application development project, how to build an application, how best to present technical information, and when project deliverables are complete.

Decisions referred include what process improvements to implement and processes to analyze, which business analysis methodology to use, what projects to manage and methodology to use, budget and resource decisions, and what technologies can be used.

G. Contact with Others:

Daily contact with clients to discuss system needs and design, and IT staff to discuss programming/analysis problems and strategies; and occasional contact with outside vendors to discuss changes or problems affecting software packages.

H. Working Conditions:

Typical office environment, subject to on-call or after-hours work to resolve system problems.

I. Knowledge, Skills, and Abilities:

Knowledge of:
- principles, theories and concepts of computer programming;
- system design principles;
- project management methodology;
- tools and technologies available to meet client information requirements;
- operating characteristics of the state's information systems environment.

Ability to:
- communicate effectively with clients in their terms and translate this information into systems terms;
- generate information systems solutions for clients;
- maintain a comprehensive perspective of systems in relation to agency and government operations;
- provide project leadership and mentorship.